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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/899,539 | 07/06/2001 | David S. Ebbo | 03797.00127 | 3399 |
| 27488 | 7590 | 11/28/2005 | | |
| MERCHANT & GOULD (MICROSOFT) P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903 | | | EXAMINER AILES, BENJAMIN A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2142 | |
| DATE MAILED: 11/28/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/899,539 | EBBO ET AL. | |
| | Examiner | Art Unit | |
| | Benjamin A. Ailes | 2142 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to correspondence filed 09 September 2005.
2. Claims 1-26 remain pending.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09 September 2005 has been entered.

Specification

4. The disclosure is objected to because of the following informalities: On page 16, paragraph [80], a period "." is missing. On page 18, paragraph [87], lines 3-4 currently reads: "...listed with the "VaryByParam feature..." and should read "...listed with the "VaryByParam" feature..."

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-9 and 14-22 are rejected under 35 U.S.C. 102(a) as being anticipated by Schloss et al. (U.S. 6,249,844 B1), hereinafter referred to as Schloss.

7. Regarding claim 1, Schloss discloses a method for providing a response to a request for information from a client computing system having an output cache for storing portions of web pages corresponding to at least partial responses to previous requests for information, the method comprising:

receiving, at the server computing system, a request for information from the client computing system (Fig. 6 and col. 6, ll. 16-17, Schloss discloses a server entity waiting to receive input from a client; col. 6, ll. 22-25, Schloss discloses for example a request in a web environment containing object requests being within an URL.);

creating a page object having references to objects on the server computing system in response to the received request for information (col. 6, ll. 22-25, Schloss discloses for example a request in a web environment containing object requests being within an URL), when the output cache contains a pre-rendered output data of an object referenced by the page object (col. 6, ll. 31-34, Schloss discloses the object request handler checks whether the requested object is in the object cache.), the pre-rendered output data of the object referenced by the page object contained in the output cache is retrieved from the output cache (col. 6, ll. 34-35, Schloss discloses if the object is cached, then the cached object is returned.) and when the output cache does not contain a pre-rendered output data of an object referenced by the page object, executable code for the object referenced by the page object not contained in the output cache is retrieved from another source and instantiated to create the object referenced

by the page object (col. 6, ll. 35-37, Schloss discloses if the object is not in the cache a request is sent to a content server or other proxy server to retrieve the object.);

inserting the retrieved pre-rendered output data and objects as components into a hierarchical tree data model such that each component is linked to at least a prior component (Figure 4, col. 5, ll. 53-55, Schloss discloses the web document being modified after fragments (objects) have been recognized and retrieved, and col. 6, ll. 41-43, Schloss discloses the object description after being modified is sent back to the client (requestor). Schloss discloses the use of digital objects used in web environments and written in XML, SGML, and HTML. XML, SGML, and HTML are all deemed to be web files which use hierarchical tree data models to organize themselves and be readable by web browsing applications.);

rendering the components of hierarchical tree data model to create a rendered page (Figure 4, col. 5, ll. 53-55, Schloss discloses the web document being modified after fragments (objects) have been recognized and retrieved, and col. 6, ll. 41-43, Schloss discloses the object description after being modified is sent back to the client (requestor). Schloss discloses the use XML); and

sending contents of the created rendered page to the client computing system (col. 3, ll. 25-27, Schloss discloses the client receiving the modified web document after the server is done processing.).

8. Claim 14 contains similar subject matter and is rejected under the same rationale as claim 1.

9. Regarding claim 2, Schloss discloses the method wherein:

the created page object includes a reference to a user control object, the user control object including instructions for obtaining data and an output caching directive for caching output data generated by rendering the user control object for the created page (col. 4, lines 24-37, Schloss discloses the use of XML code, the object request handler parses the code and determines the cacheability; ll. 50-54, Schloss discusses again the steps taken to determine cacheability of fragments/objects.),

the step of rendering further comprises:

executing instructions of the user control object to obtain the data and the output data (col. 6, lines 32-35, Schloss discloses the use of the object request handler to parse the code and obtain the data needed, whether it be from the cache or from another location (i.e. a content server).); and

storing the output data in the output cache (col. 6, ll. 43-48, Schloss discloses the use of an object cache manager to determine the cacheability of an object/fragment and if the object/fragment is cacheable, then the object/fragment is cached into the output cache.).

10. Claim 15 contains similar subject matter and is rejected under the same rationale as claim 2.

11. Regarding claim 3, Schloss discloses the method wherein the contents of the created rendered page comprises an HTML specification for a web page (col. 2, lines 40-42, Schloss discloses the use of HTML.).

12. Claim 16 contains similar subject matter and is rejected under the same rationale as claim 3.

13. Regarding claim 4, Schloss discloses the method wherein:

the created rendered page includes at least one control (col. 4, lines 24-37, Schloss discloses the use of XML code, the object request handler parses the code and determines the cacheability; ll. 50-54, Schloss discusses again the steps taken to determine cacheability of fragments/objects.);

the step of inserting a component includes inserting a component corresponding to each respective one of the at least one control (col. 4, lines 24-37, Schloss discloses the use of XML code, the object request handler parses the code and determines the cacheability; ll. 50-54, Schloss discusses again the steps taken to determine cacheability of fragments/objects. The fragments/objects being the controls.); and

the step of rendering the page comprises rendering each one of the components individually (Fig. 11 and col. 8, ll. 4-10, Schloss discloses the handler generating (rendering) the objects/fragments as needed.).

14. Claim 17 contains similar subject matter and is rejected under the same rationale as claim 4.

15. Regarding claim 5, Schloss discloses the method further comprising:

creating the hierarchical tree data model including each of the components and a hierarchical relationship among the components, the data model being used during the step of the rendering the page to render each of the components (Figure 4, col. 5, ll. 53-55, Schloss discloses the web document being modified after fragments (objects) have been recognized and retrieved, and col. 6, ll. 41-43, Schloss discloses the object

description after being modified is sent back to the client (requestor). Schloss discloses the use XML).

16. Claim 18 contains similar subject matter and is rejected under the same rationale as claim 5.

17. Regarding claim 6, Schloss discloses the method wherein the output caching directive includes a time duration during which the output data is permitted to reside in the output cache (col. 8, line 60 – col. 9, line 6, Schloss discloses a caching method wherein when an update becomes available for an item in the cache, the item is updated accordingly.).

18. Claim 19 contains similar subject matter and is rejected under the same rationale as claim 6.

19. Regarding claim 7, Schloss discloses the method wherein the output caching directive includes an attribute indicating a condition for varying the output data to be stored in the output cache (col. 6, lines 43-48, Schloss discloses storing items in the cache based on criteria, i.e. static vs. dynamic, size, update frequency, or time since last reference).

20. Claim 20 contains similar subject matter and is rejected under the same rationale as claim 7.

21. Regarding claim 8, Schloss discloses the method wherein the attribute indicates that the output data is to be stored in the output cache according to a type of browser used by the client computing system (col. 3, lines 26-31, Schloss discloses the method

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of controlling what is cached based on the user's computing system functionality being used (i.e. a handheld device, a set top box, or an Internet appliance).).

22. Claim 21 contains similar subject matter and is rejected under the same rationale as claim 8.

23. Regarding claim 9, Schloss discloses the method wherein the attribute indicates that the output data is to be stored in the output cache according to values of at least one parameter (col. 6, lines 43-48, Schloss discloses storing items in the cache based on criteria, i.e. static vs. dynamic, size, update frequency, or time since last reference).

24. Claim 22 contains similar subject matter and is rejected under the same rationale as claim 9.

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

27. Claims 10, 11, 13, 23, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schloss in view of Mattson (U.S. Patent Number 5,434,992), hereinafter referred to as Mattson.

28. Regarding claim 10, Schloss discloses the need to increase data output performance, but is silent on the use of performance counters to monitor output-caching performance. However, Mattson discloses the use of counters to measure the performance of a cache (col. 9, line 56 – col. 10, line 2). One of ordinary skill in the art at the time of the applicant's invention would have recognized the advantage of using performance counters in order to improve the output of data (Schloss, col. 2, lines 27-30). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to combine the performance counters disclosed by Mattson with the data output method using data caching disclosed by Schloss.

29. Claim 23 contains similar subject matter and is rejected under the same rationale as claim 10.

30. Regarding claims 11 and 24, Schloss discloses the need to increase data output performance, but is silent on the use of hit and miss counters to monitor output-caching performance. However, Mattson discloses the uses of hit and miss counters to measure the performance of a cache (col. 9, lines 56-64). The same motivation that was utilized in the combination of claims 10 and 23 applies equally as well to claims 11 and 24.

31. Regarding claims 13 and 26, Schloss discloses the need to increase data output performance, but is silent on the use of calculating an output cache hit ratio to monitor output-caching performance. However, Mattson discloses the use of calculating hit ratios in order to measure the performance of a cache (col. 9, lines 56-64). The same motivation that was utilized in the combination of claims 10 and 23 applies equally as well to claims 13 and 26.

32. Claims 12 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schloss in view of Smith et al (U.S. Patent Number 5,802,600), hereinafter referred to as Smith et al.

33. Regarding claims 12 and 25, in accordance with claims 10 and 23, respectively, Schloss discloses the need to increase data output performance, but is silent on counting the number of additions and removals to the output cache. However, Smith et al. disclose gathering statistics based on directory entries to measure output-caching performance (col. 5, lines 8-54). One of ordinary skill in the art at the time of the applicant's invention would have recognized the advantage of using performance counters in order to improve the output of data (Schloss, col. 2, lines 27-30). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to combine the statistics gathering method disclosed by Smith et al. with the data output method using data caching disclosed by Schloss.

Response to Arguments

34. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Datta (US 2003/0004998 A1) discloses proxy-based acceleration of dynamically generated content.

Mutschler, III et al. (U.S. 5,974,430) disclose a method for dynamically embedding objects stored in a web server within HTML for display by a web browser.

Arora et al. (U.S. 5,911,145) disclose hierarchical structure editor for web sites.

Major (U.S. 6,542,967 B1) discloses a cache object store that is organized to provide fast and efficient storage of data.

Cherkasova et al. (U.S. 6,546,473 B2) disclose a method for cache replacement of web documents.

Mattis et al. (U.S. 6,915,307 B1, 6,128,623) disclose a high performance object cache.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin A. Ailes whose telephone number is (571)272-3899. The examiner can normally be reached on M-F 6:30-4, IFP Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beatriz Prieto
BEATRIZ PRIETO
PRIMARY EXAMINER

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